

 <p>Financial Assistance Award</p> <p>DENALI COMMISSION 510 L Street, Suite 410 Anchorage, Alaska 99501 (907) 271-1414 (phone) (907) 271-1415 (fax) www.denali.gov</p>		Award Number	01597-00																																																																													
		Award Title	Thermosiphon Refrigeration Collars Phase 2																																																																													
		Performance Period	March 1, 2020 through November 30, 2021																																																																													
Authority 112 Stat 1854	CFDA Number 90.100	<u>Recipient Organization & Address</u> Alaska Native Tribal Health Consortium Inc. 4000 Ambassador Dr Community Health Services Phone: [NO DATA] Recipient DUNS # 071375658 TIN # 920162721																																																																														
Denali Commission Finance Officer Certification																																																																																
<u>Cost Share Distribution Table</u> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Accounting Code</th> <th colspan="2">New Funding</th> <th colspan="2">Prior Period Funding</th> <th rowspan="2">Total</th> </tr> <tr> <th>Denali Commission</th> <th>Other Contributors</th> <th>Denali Commission</th> <th>Other Contributors</th> </tr> </thead> <tbody> <tr> <td>95670000</td> <td>\$225,000.00</td> <td></td> <td>\$0.00</td> <td></td> <td>\$225,000.00</td> </tr> <tr><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td></td><td>\$0.00</td></tr> <tr><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td></td><td>\$0.00</td></tr> <tr><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td></td><td>\$0.00</td></tr> <tr><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td></td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr><td></td><td></td><td>\$0.00</td><td></td><td>\$0.00</td><td>\$0.00</td></tr> <tr> <td>Total</td> <td>\$225,000.00</td> <td>\$0.00</td> <td>\$0.00</td> <td>\$0.00</td> <td>\$225,000.00</td> </tr> </tbody> </table>					Accounting Code	New Funding		Prior Period Funding		Total	Denali Commission	Other Contributors	Denali Commission	Other Contributors	95670000	\$225,000.00		\$0.00		\$225,000.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00	Total	\$225,000.00	\$0.00	\$0.00	\$0.00	\$225,000.00
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Signature of Authorized Official - Denali Commission Electronically Signed		Typed Name and Title Joseph Stovall Chief Operating Officer		Date 06/05/2020																																																																												

AWARD ATTACHMENTS

Alaska Native Tribal Health Consortium Inc.

01597-00

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1. Terms and Conditions
 2. Attachment A
 3. Budget and Funding Summary

**Financial Assistance Award Terms and Conditions
Between the Denali Commission and Alaska Native Tribal Health Consortium
For Thermosiphon Refrigeration Collars Phase 2
Award No. 1597**

1. Project Summary

a. Scope of Work:

- Provide design, fabrication, integration, testing, and monitoring for the Phase 2 Thermosiphon Refrigeration Collars
- Provide bid-ready documents to solicit manufacturing and field deployment contractor

b. Deliverables: Prototype designs, fabrications, testing, field installation, performance data monitoring, and final designs/specs bid package.

c. Budget: The Commission is making \$225,000 available for the project via this Financial Assistance Award (FAA). This amount includes all direct, indirect, and pre-award costs (if any) authorized pursuant to 2 CFR 200.458. All Commission funding is intended to be used for the scope of work identified in this FAA only. Any funds remaining after the full scope of work has been completed shall be returned to the Denali Commission consistent with 2 CFR 200.345.

d. Delivery Method: The project will be completed using Alaska Native Tribal Health Consortium's (ANTHC) in-house staff and term contractor Cold Climate Housing and Research Center (CCHRC) for the solar consultation and Fairbanks data monitoring portion.

e. Performance Period: The Period of Performance for this FAA is 1 March 2020 through 30 November 2021. In accordance with 2 CFR 200.309 Recipients can only incur obligations or costs against this FAA during the Period of Performance, unless specifically authorized in the Special Provisions (Section 14 of this document). If a project cannot be completed within the approved Period of Performance, an extension request must be made in accordance with the Commission's *Recipient Guidelines and Requirements* (RGR) document dated September 2018, available at www.denali.gov.

More detailed information on scope, deliverables, budget, delivery method, and schedule are included in Attachment A dated 7 May 2020.

2. Project Reporting and Commission Site Visits

Progress reports and a close-out report are required under this FAA. Progress Reports shall be submitted at the frequency stipulated in the Special Provisions.

The Closeout Report shall be completed within 90-days of the end of the Period of Performance. All reports must be submitted using the Denali Commission's on-line Project Database System, available at www.denali.gov/dcpdb.

Commission staff or agents of the Commission may make visits to the project site and/or home office to monitor progress during and/or after the Period of Performance. The Recipient shall coordinate and make information available as necessary to facilitate any such site visits.

Refer to the *Recipient Guidelines and Requirements* document for further information related to reports and site visits.

3. Payments

Payments under this FAA will be made in accordance with 2 CFR 200.305 by electronic transfer in response to a Standard Form 270 (SF-270) "Request for Advance or Reimbursement", submitted by the Recipient. At a minimum, all 270's must include summary cost information on labor, materials, contracts/consultants, and indirect costs. Detailed documentation is required for any single expenditure greater than \$50,000. If Pre-award Costs and/or Advance Payments are authorized under this FAA, the Special Provisions will indicate so. Requests for reimbursements may be made as needed. Refer to the *Recipient Guidelines and Requirements* document for further information about submitting SF-270's.

4. Modifications

In accordance with 2 CFR 200.308, the Recipient shall report deviations in project scope, budget, delivery method, management plan, schedule, or changed site conditions, and request prior approvals from the Program Manager. The Recipient shall also submit written requests to the Program Manager for the replacement of Key Staff identified in the Special Provisions. Refer to the *Recipient Guidelines and Requirements* document for further information about modifying a Financial Assistance Award.

5. Financial Management, Record Keeping, Internal Controls, and Audits

The Recipient must have financial management and record keeping systems that are consistent with 2 CFR 200.302. If the Recipient is a State organization it must expend and account for FAA funds in accordance with applicable State laws and procedures for expending and accounting for the State's own funds.

The Recipient must establish and maintain effective internal controls with respect to this FAA that are consistent with 2 CFR 200.303. In accordance with 2 CFR 200.501, Recipients that expend \$750,000 or more of federal funds in a year shall have a single or program-specific audit conducted for that year.

Refer to the *Recipient Guidelines and Requirements* document for further information about financial management, record keeping, internal controls and audits.

6. Direct and Indirect Costs

All direct costs must be allowable and reasonable. Indirect costs must be allocable based on accepted accounting policies and practices. Indirect costs must be specifically included as a line item or identified with appropriate notes in the approved FAA budget. Refer to 2 CFR 200 Subpart E (Cost Principles) and the *Recipient Guidelines and Requirements* document for further information on direct and indirect costs.

7. Sub-Awards

All sub-awards and contracts issued by the Recipient under this FAA must comply with 2 CFR 200.331 and 332.

8. Procurements

- a. States: In accordance with 2 CFR 200.317, when procuring property and services under this FAA, a State Recipient must follow the same policies and procedures it uses for procurements from its non-Federal funds. The State Recipient must also comply with 2 CFR 200.322, and ensure that every purchase order or contract includes any clauses and provisions required by 2 CFR 200.326.
- b. Other Non-Federal Entities: All other non-Federal Recipients, including subrecipients of a State, must follow their own documented procurement procedures, provided that the procedures conform to applicable Federal law and the standards in 2 CFR 200.318 through 200.326. Refer to the *Recipient Guidelines and Requirements* document for further information on this subject.

9. Acknowledgement of Support

The Recipient shall name the Denali Commission as a financial contributor and project/program partner in all media correspondence related to the work supported by this FAA. If Commission funds are used for construction, the Recipient shall also display a sign at the construction site that acknowledges the Commission's support. Refer to the *Recipient Guidelines and Requirements* document for further information on this subject.

10. Real Property and Equipment

The Disposition requirements and restrictions set forth in 2 CFR 200.310 through 200.316 apply unless specifically altered in the Special Provisions to this FAA. Any Real Property reporting requirements apply in accordance with 2 CFR 200.329 will be stipulated in the Special Provisions to this FAA.

11. Conflict of Interest

In accordance with 2 CFR 200.112, the Recipient must disclose in writing any potential conflicts of interest to the Commission. In addition, 2 CFR 200.318 requires that Recipients maintain written standards of conduct covering conflicts of interest and governing the performance of their employees engaged in the selection, award, and administration of contracts. Refer to the *Recipient Guidelines and Requirements* document for further information on this subject.

12. Denali Commission Policies

Recipients may be required to comply with certain published Denali Commission policies which can be found in the *Recipient Guidelines and Requirements* document. Any specific requirements or deliverables related to these policies will be stipulated in the Special Provisions to this FAA.

13. Laws and Regulations

Recipients are required to comply with all applicable Federal laws and regulations. General categories of potentially applicable laws and regulations are summarized below. Refer to the *Recipient Guidelines and Requirements* document for further information on specific laws and regulations that may apply.

- a. Debarment and Suspension
- b. Whistle-blower Protection
- c. Non-Discrimination
- d. Lobbying and Propaganda
- e. Environmental
- f. Drug-Free Workplace
- g. Travel
- h. Human Rights
- i. Animal Welfare
- j. Executive Compensation

14. Other Provisions

- a. The United States expressly disclaims any and all responsibility or liability to the Recipient or sub-recipients for the actions of the Recipient or sub-recipients resulting in death, bodily injury, property damages, or any other losses resulting in any way from the performance of this FAA, including sub-awards, contracts, or sub-contracts issued in connection with this FAA.
- b. To the maximum extent practicable, considering applicable laws, the Recipient shall accomplish the project contemplated by this FAA using local Alaska firms and labor.
- c. All terms and conditions contained in this FAA apply to any sub-recipient under this FAA.

- d. Failure to comply with the provisions of this FAA or maintain satisfactory performance may result in additional FAA conditions pursuant to 2 CFR 207. This includes but is not limited to: temporarily withholding of payments pending the correction of the deficiency; disallowance of project costs; wholly or partially suspending or terminating the FAA. In addition, failure to comply with the provisions of this FAA may also have a negative impact on the Recipient's eligibility for future Federal awards.

15. Special Provisions

Progress Reports: Shall be submitted on a quarterly basis. The first reporting period is 30 May 2020 to 30 June 2020, and quarterly thereafter in accordance with the Commission's *Recipient Guidelines and Requirements*.

Pre-award Costs: N/A

Advance Payments: N/A

Key Staff: Bailey Gamble, Project Manager

NEPA: Type A.7 Categorical Exclusion per Denali Commission National Environmental Policy Act (NEPA) Implementing Procedures published in 45 CFR Part 900 on 1 October 2016 therefore no further NEPA documentation required.

Cooperative Agreement: N/A

Denali Commission Policies: N/A

Insurance: The Denali Commission shall be named additional insured on ANTHC's General Liability Insurance Policy and the General Liability Insurance Policy of all other independent professional service firms with a primary role on the project.

16. Program Manager, Financial Manager & Other Contact Information

Denali Commission	Recipient
Jocelyn Fenton Program Manager 510 L Street, Suite 410 Anchorage, AK 99501 Phone: 907-271-5232 E-mail: jfenton@denali.gov	Bailey Gamble Project Manager 4500 Diplomacy Drive, Suite 227 Anchorage, AK 99508 Phone: 907-729-4501 Email: bbgamble@anthc.org
Janet Davis Grants Management Officer 510 L Street, Suite 410 Anchorage, AK 99501 Phone: 907-271-3036 E-mail: jdavis@denali.gov	Dolly Bush Director of Accounting Services 4500 Diplomacy Drive Anchorage, AK 99508 Phone: 907-729-2804 Email: hebush@anthc.org

***Financial Assistance Award
Between the Denali Commission and Alaska Native Tribal Health Consortium
For Phase 2 Thermosiphon Refrigeration Collar Development
Attachment A
7 May 2020***

Background:

Passive thermosiphon cooling systems in Alaska have maintained permafrost foundations for decades by transferring heat from the ground to the air during the winter to maintain stable, frozen ground through the summer. As weather patterns shift toward shorter winters and higher average temperatures, a growing number of passive cooling systems are no longer able to generate sufficient winter cooling to protect foundations and other infrastructure against thaw throughout the summer.

ANTHC has developed an active cooling retrofit called the Thermosiphon Refrigeration Collar (TRC) – a compact, modular, solar-powered refrigeration unit that clamps onto existing thermosiphons to provide supplemental cooling during times when the sun is shining. Advantages of the TRC over other passive to active conversions (which typically utilize a larger, centralized chiller) include easier and more affordable transportation and installation and the ability to operate entirely on renewables, significantly lowering operational costs while protecting threatened infrastructure.

ANTHC has built and is currently monitoring the performance of the first TRC prototype in Fairbanks in collaboration with the Cold Climate Housing Research Center (CCHRC). This project is for Phase 2 of TRC development which would build upon previous work to develop a second, improved iteration of the TRC and optimize integration of solar and battery storage.

Scope of Work:

ANTHC shall provide design, construction/fabrication, integration, and test the solar and battery module for the Phase 2 TRC, optimizing the technology for field deployment. The final design documents and drawings for a Phase 2 TRC shall be bid-ready for solicitation of a manufacturer to build multiple TRC units for field deployment.

ANTHC shall provide one year of monitoring and data acquisition of performance measurements after installation of the final fabricated Phase 2 TRC prototype.

Deliverables:

Deliverables include

- Design of Phase 2 TRC prototype
- Fabrication of Phase 2 TRC prototype
- Initial testing and field installation of Phase 2 TRC prototype
- Performance monitoring data logs
- Finalization of engineered designs and specification for manufacture solicitation

Final deliverables will be provided to the Denali Commission.

Budget:

See attached Budget and Funding Summary dated 26 February 2020.

Delivery Method:

ANTHC will conduct all TRC Phase 2 design work in-house. Initial testing of the second TRC prototype will be carried out at ANTHC's Anchorage-based electrical shop where a test thermosiphon system is already in place. ANTHC will contract CCHRC for solar and energy storage system design, testing and performance monitoring support. ANTHC will install the second prototype with solar and storage system on an instrumented thermosiphon at CCHRC's Fairbanks facility. CCHRC will provide monitoring support similar to the support provided on the first TRC prototype.

Schedule:

Key project milestones are summarized below.

Research, specify and order components:	June 30, 2020
Construct and perform initial testing:	September 31, 2020
Installation of system at Fairbanks facility:	October 31, 2020
Complete final engineered designs and specifications for solicitation:	December 31, 2020
Performance measurement data logging complete:	October 31, 2021
Award Closeout:	November 30, 2021

Budget			
Line	Item/Activity	Amount	Basis/Notes
	Direct Costs		
1	Project Management ^a	\$7,148	80 hours @ average burdened rate of \$89.35 per hour
2	Project Labor ^a	\$61,919	1100 hours @ average burdened rate of \$56.29 per hour (Mechanical Engineer II, Electrician III, CAD Tech II)
3	Pool Labor ^b	\$40,284	1200 hours x weighted pool rate of \$33.57 per hour
4	Materials & Freight	\$50,450	
5	Travel	\$6,000	6 trips to Fairbanks @ \$1000/trip
6	Specialty Work	\$40,000	Monitoring (\$30k), Solar Consultation (\$10k) CCHRC
7	Subtotal	\$205,801	
	Indirect^c		
8	Indirect Costs	\$19,195	25.7% of base pay rates, unless support is provided by contractors ^d
9	Total	\$224,996	
10	Indirect Cost % of Total Budget	8.5%	

Notes

a. Based on ANTHC estimates, dated 18 March 2019 increased by 3% for 2020, includes fringe

b. Current pool rates in accordance with October 2015 ANTHC/DEHE Project Cost Allocation Methodology

c. ANTHC has a federally negotiated indirect rate of 25.7% dated 8 November 2016 from the US Department of Health and Human Services; the 25.7% rate will be applied to actual eligible reimbursable direct costs (MTDC's) for line items funded by the Denali Commission pursuant to this FAA

d. Indirect on subcontractors is limited to 25.7% of the first \$25,000 of each subaward.

Funding			
Line	Source	Amount	Notes
11	Denali Commission	\$225,000	This Action
12	Total	\$ 225,000	